

# United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/839,911	04/20/2001	Albert W. DeBoni	TRW(TE)5659	2242
26294	7590 03/29/2004		EXAMINER	
TAROLLI, SUNDHEIM, COVELL & TUMMINO L.L.P. 526 SUPERIOR AVENUE, SUITE 1111 CLEVEVLAND, OH 44114			MARC COLEMAN, MARTHE Y	
			ART UNIT	PAPER NUMBER
	,		3661	

DATE MAILED: 03/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/839,911	•				
Office Action Summary	Examiner	DEBONI, ALBERT W.				
The MAIL ING DATE of this communication	Marthe Y Marc-Coleman	3661				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR RETHE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFF after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a  - If NO period for reply is specified above, the maximum statutory per  - Failure to reply within the set or extended period for reply will, by states and the period for reply will, by states and patent term adjustment. See 37 CFR 1.704(b).  Status	N. R 1.136(a). In no event, however, may a reply within the statutory minimum of thi riod will apply and will expire SIX (6) MOI atute, cause the application to become A	reply be timely filed rty (30) days will be considered timely. NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).				
1) Responsive to communication(s) filed on 1	<u>1/14/04</u> .					
2a)⊠ This action is <b>FINAL</b> . 2b)□	This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-18 is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) <u>15-18</u> is/are allowed.						
6) Claim(s) 1-5,7-10 and 12-14 is/are rejected.						
7) Claim(s) 6 and 11 is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.  Application Papers						
9) The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12)☐ The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
<ul> <li>a)          The translation of the foreign language provisional application has been received.     </li> <li>15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.</li> </ul>						
Attachment(s)						
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449) Paper Note</li> </ol>	5) Notice of	Summary (PTO-413) Paper No(s) Informal Patent Application (PTO-152)				

Art Unit: 3661

## **DETAILED ACTION**

1. This office action is in response to communication filed on 1/14/04.

# Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1-5, 8-10, 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Burton et al. (GB 2 292 126 A).

In regard to claim 1, Burton et al. discloses a system for controlling an active suspension component of a vehicle and a vehicle occupant protection device of the vehicle (see pages 2-3), said system comprising: a single controller (which is the signal processor 16) (see Fig. 1 and page 3), said single controller being controllably connected to at least one active suspension component (see element 18 in Fig. 1 and page 3) of a vehicle and controllably connected to at least one vehicle occupant protection device of the vehicle (see element 19 and Fig. 1 and page 3); and at least one sensor for sensing acceleration of the vehicle along at least one axis of the vehicle (see elements 21, 22, 22 of Fig. 1 and pages 1-3), said at least one sensor being operatively connected to said controller to provide at least one signal indicative of vehicle acceleration along the at least one axis to said single controller (see elements 21, 22, 22 of Fig. 1 and pages 1-3), said single controller being operative to control the

Art Unit: 3661

at least one active suspension component in response to said at least one signal (see page 3), said single controller also being operative to control the at least one vehicle occupant protection device in response to said at least one signal (see page 3).

In regard to claim 13, Burton et al. discloses a system for controlling an active

suspension component of a vehicle and a vehicle occupant protection device of the vehicle (see pages 2-3), said system comprising: a single electronic controller which is the signal processor 16) (see Fig. 1 and page 3), said single electronic controller being controllably connected to at least one active suspension component of a vehicle and controllably connected to at least one vehicle occupant protection device of the vehicle (see page 3 and Fig. 1); and at least one accelerometer for sensing acceleration of the vehicle along an x-axis, a y-axis and a z-axis of the vehicle (see Fig. 1 and pages 2-3), said at least one accelerometer being operatively connected to said single electronic controller to provide at least one signal indicative of vehicle acceleration along the x-axis, y-axis and z-axis to said single electronic controller, said single electronic controller being operative to control the at least one active suspension component in response to said at least one signal (see Fig. 1 and pages 2-3), said single electronic controller also being operative to control the at least one vehicle occupant protection device in response to said at least one signal (see abstract and pages 2-3), said system being free from any other controllers for controlling the at least one active suspension component and the at least one vehicle occupant protection device of the vehicle (see Fig. 1).

Art Unit: 3661

In regard to claim 2, Burton et al. discloses that said at least one sensor comprises at least one accelerometer (see accelerometers 21, 22, 23 in Fig. 1).

In regard to claim 3, Burton et al. disclose that the at least one axis comprises an x-axis of the vehicle, a y-axis of the vehicle and a z-axis of the vehicle (see Fig. 1 and page 2).

In regard to claims 4 and 14, Burton et al. discloses that said at least one accelerometer comprises a first accelerometer for sensing acceleration of the vehicle along the x-axis, a second accelerometer for sensing acceleration of the vehicle along the y-axis, and a third accelerometer for sensing acceleration of the vehicle along the z-axis (see accelerometers 21, 22, 23 in Fig. 1 and pages 2-3).

In regard to claim 5, Burton et al. acceleration measuring system only includes the three parameters thereby Burton et al.'s system is free from any other accelerometers that are operative to provide a signal for controlling the at least one active suspension component and the at least one vehicle occupant protection device (see Fig. 1).

In regard to claim 8, Burton et al. disclose that said single controller comprises an electronic controller (see element 16 signal processor).

Art Unit: 3661

In regard to claim 9, Burton et al. discloses controller 18 as the only controller in the system. Said single controller is a single electronic controller operative to control the at least one active suspension component and the at least one vehicle occupant protection device, said system being free from any other controllers for controlling the at least one active suspension component and the at least one vehicle occupant protection device (see controller 18 in Fig. 1).

In regard to claim 10, Burton et al. discloses that the at least one vehicle occupant protection device comprises an inflatable vehicle occupant protection device (see abstract).

## Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 7 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burton et al. (GB 2 292 126 A) in view of Halasz et al. (U.S. Patent No. 5,890,084).

Art Unit: 3661

In regard to claims 7 and 12, Burton et al. discloses three accelerators 21, 22, and 23. However Burton fails to disclose that said at least one accelerometer comprises a multiple axis accelerometer.

Halasz et al., on the other hand, discloses a three-axis accelerometer (see col. 6 lines 46-47).

At the time of the invention, it would have been obvious to one skilled in the art to incorporate Halasz's et al. three-axis accelerometer into the acceleration system of Burton et al. because it would reduce the number of part in the seatbelt retractor.

## Allowable Subject Matter

6. Claims 15-18 are allowed over the prior art of record.

Claims 6 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

## Response to Arguments

7. Applicant's arguments filed on August 15, 2003 have been fully considered but they are not persuasive.

Applicant argues that "there is no teaching of the controller 18 being used to control the airbag system. The control unit is clearly not connected to the suspension control unit 18 and also to another electrical sub-system of the motor vehicle...".

Art Unit: 3661

Examiner respectfully disagrees. Burton does indeed discloses a controller 18 connected to the airbag and the suspension system in Fig. 1 and on page 3.

## **Conclusion**

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marthe Y Marc-Coleman whose telephone number is (703) 305-4970. The examiner can normally be reached on Monday-Thursday from 9:30 AM - 8:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William A Cuchlinski can be reached on (703) 308-3873. The fax phone numbers for the organization where this application or proceeding is assigned are (703)

Art Unit: 3661

872-93069306 for regular communications and (703) 872-93069306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Patent Examiner

Mouthe Y · Marc-Coleman

Marthe Marc-Coleman

March 24, 2004